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## Patent claims

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1. A method for regenerating a nitrogen oxide storage catalytic converter (4) arranged in an exhaust pipe (3) of an internal combustion engine (1), a constant value being set in a first regeneration mode for the air/fuel ratio  $\lambda_M$  of the air/fuel mixture burned in the internal combustion engine (1) when a predeterminable triggering threshold value, which triggers a regeneration of the nitrogen oxide storage catalytic converter (4), for the nitrogen oxide concentration in the exhaust gas on the output side of the nitrogen oxide storage catalytic converter (4) is exceeded, and the first regeneration mode being followed by a second regeneration mode, characterized in that, in the second regeneration mode, a variable value is provided for the air/fuel ratio  $\lambda_M$  such that the time rate of change  $d\lambda_M/dt$  of the air/fuel ratio  $\lambda_M$  is set as a function of the mass flow of the exhaust gas flowing through the nitrogen oxide storage catalytic converter (4) or as a function of an internal combustion engine operating variable linked with the mass flow of the exhaust gas.
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2. The method as claimed in claim 1, characterized in that the first regeneration mode is ended after a predeterminable first period of time.
3. The method as claimed in claim 1 or 2, characterized in that the second regeneration mode is ended after a predeterminable second period of time.

4. The method as claimed in one of the preceding claims, characterized in that, in a third regeneration mode, the time rate of change  $d\lambda_M/dt$  of the air/fuel ratio  $\lambda_M$  is set as a function of the mass flow of exhaust gas or as a function of an internal combustion engine operating variable linked with the mass flow of exhaust gas and as a function of the measured value of a lambda probe (6) arranged in the exhaust pipe (3) on the output side of the nitrogen oxide storage catalytic converter (4).
5. The method as claimed in claim 4, characterized in that the third regeneration mode is set directly after the second regeneration mode ends.
6. The method as claimed in one of the preceding claims, characterized in that the setting of the air/fuel ratio  $\lambda_M$  is limited to a value range with a predeterminable lower limit value  $\lambda_{min}$  and a predeterminable upper limit value  $\lambda_{max}$ .
7. The method as claimed in one of the preceding claims, characterized in that the triggering threshold value for triggering the regeneration of the nitrogen oxide storage catalytic converter (4) is predetermined and/or the time rate of change  $d\lambda_M/dt$  of the air/fuel ratio  $\lambda_M$  is set as a function of an aging factor representing the aging of the nitrogen oxide storage catalytic converter (4).